PROJECT DESCRIPTION

I. GENERAL

This project involves the replacement of inductive loop presence detection with overhead video detection at the intersection of US-113 and MD 376 and installing non-invasive probes on US-113 for passage detection. This replacement is due to the upcoming milling and overlay project on MD 376.

II. INTERSECTION OPERATION

- The intersection will continue to operate in a NEMA (6) six-phase, semi-actuated mode, with the Northbound and Southbound left turns operating concurrently. Eastbound and Westbound movements operate concurrently as well. Firehouse pre-emption is also incorporated
- An existing NEMA full-traffic-actuate eight (8) phase controller housed in a NEMA size 6 base mounted cabinet shall be utilized at this location.

NOTES

- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall
- notify the Project Engineer immediately so that the conflict may be resolved.

 The Contractor shall maintain the continuous operation of all interconnect, vehicular, pedestrian detectors, and lighting devices. If any device is damaged by the contractor, it shall be repaired within 72 hours by the contractor at no cost to the Administration after notification by the Engineer.

 All existing traffic signal equipment removed shall become the property of the Contractor upon completion of the signal.

 The Contractor shall be responsible for identifying and labeling each existing cable.
- The Contractor shall be responsible for identifying and labeling each existing cable utilizing the conduit between the signal cabinet and the nearest handhole and removing from all conduits, handholes, and the cabinet any unused cables prior to the installation of new cables. The contractor shall be responsible for terminating all signal cable to the appropriate terminals and properly labeling each cable.

CONTACTS

DISTRICT	

410-677-4006

MR. DONNIE L. DREWER DISTRICT ENGINEER

MR. KENNETH CIMINO

ASSISTANT DISTRICT ENGINEER - TRAFFIC 410-677-4040

MR. BRUCE W. POOLE UTILITY ENGINEER 410-677-4082

MR. GREG HOLSEY ASSISTANT DISTRICT ENGINEER - CONSTRUCTION

410-677-4020

MR. WAYNE WEICHMAN ASSISTANT DISTRICT ENGINEER - MAINTENANCE 410-677-4010

OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR. CHIEF, TRAFFIC OPERATIONS 410-787-7630

MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS 410-787-7630

MR. ED RODENHIZER TEAM LEADER SIGNAL OPERATIONS 410-787-7650

MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS 410-787-7670

MS. DARLENE EIDE

SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE) 410-787-7668

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADIMISTRATION

ITEM NO. DESCRIPTION	UNITS Q	UANTITY
9086 VIDEO DETECTION INTERFACE EQUIPMENT: 1-4	EA	1

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

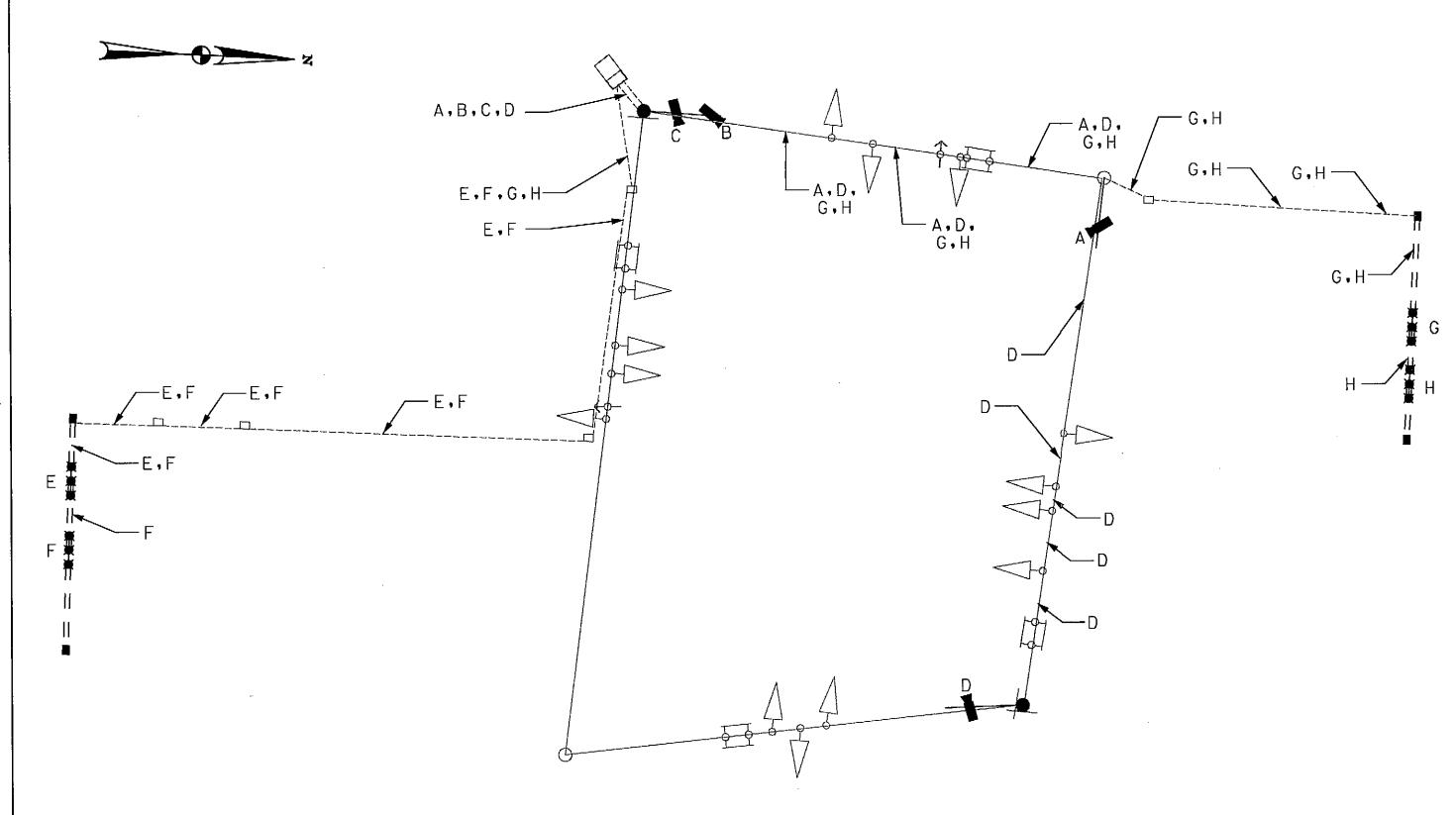
ITEM NO. DESCRIPTION	UNITS QUANTITY
MAINTENANCE OF TRAFFIC PER ASSIGNMENT 8005 ADJUST HANDHOLE TO GRADE INCLUDING COLLAR 8007 ANY SIZE LIGHTING ARM ON SIGNAL STRUCTURE (FOR VIDEO DETECTION) 8023 NONINVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1000' 8024 REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT) 8028 VIDEO DETECTION CAMERA AND CABLE (ANY LENGTH) 8034 UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED 8041 WEATHERHEAD, UP TO 3 INCH 8044 FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA 1 EA 7 EA 3 EA 2 EA 1 EA 4 LF 120 EA 1

C. IF THE CABINET IS TO BE REMOVED SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

R | R | R PHASE 1 AND 5 1 AND 5 CHANGE MAY CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6 RR G |←R--|←R--| |**←**G−|**←**G− G PHASE 1 AND 6 G 1 CHANGE \triangleleft — $R \mid +G-\mid +G-\mid G\mid$ PHASE 2 AND 5 5 CHANGE PHASE 2 AND 6 2 AND 6 CHANGE ←R-|←R-| R | R |←R-|←R-| R | R G G PHASE 4 AND 8 R +R-|+R-| R | R |+R-|+R-| R | R | 4 AND 8 CHANGE FLASHING |FL/RA|FL/RA| FL/Y | FL/Y |FL/RA|FL/RA| FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | FL/R | FL/R | OPERATION FIREHOUSE R PRE-EMPTION PHASE 1 & 6 PRE-EMPTION **←**Υ-- **←**Υ- Υ Y |←R-|←R-| R | CLEARANCE PHASE 2 & 6 G |←R-|←R-| G R NORMAL OPERATION FIREHOUSE R G PRE-EMPTION PHASE 4 PRE-EMPTION +R-|+R-| R | R |+R-|+R-| R CLEARANCE PHASE 2 & 6 R Rİ R G |←R--|←R--| G G NORMAL OPERATION

PHASE CHART

WIRING DIAGRAM



3 CONDUCTOR CABLE FOR VIDEO DETECTION NON-INVASIVE DETECTOR LEAD IN CABLES

> **TOD NO: XX353-20 SHA NO: WO340K53** US 113 @ MD 376



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY

TRAFFIC ENGINEERING DESIGN DIVISION US-113 (WORCESTER HWY) AT MD 376 (BAY ST)

BERLIN, MARYLAND

GENERAL INFORMATION PLAN

SCALE	<u>20</u> ' DAT	E <u>9/01/10</u>	CONTRACT NOX	<u> </u>
DESIGNED BY	K. OWENS	_ COUNTY	WORCESTE	3
	K. OWENS		23011328,0	
CHECKED BY A. G	GRIFFIN/J. PALADUGU	TIMS NO	D	
F.A.P. NO.		_ TOD NO)	
TS NO. 1739 E	DRAWING	pSG OFNOO1	SHEET NO. 2	OF 2